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ABSTRACT

The hypothesis that individual differences in psychological differentiation are related to the perceptions of the independence of leadership behaviors was tested. After viewing a supervisor-subordinate interaction sequence on closed circuit television tape, subjects responded to questionnaires measuring their perception/judgments of the supervisor's behavior and their degree of psychological differentiation. The results supported the hypothesis in that field dependent subjects perceived/judged Consideration and Initiating Structure behaviors to be significantly more related than field independent subjects. The implication of these results are discussed in terms of both the leadership and the perceptual/cognitive literature. (Author)

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THE RELATIONSHIP BETWEEN PSYCHOLOGICAL DIFFERENTIATION AND PERCEPTIONS OF SUPERVISORY BEHAVIOR

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THE RELATIONSHIP BETWEEN PSYCHOLOGICAL DIFFERENTIATION AND PERCEPTIONS OF SUPERVISORY BEHAVIOR[1]

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The hypothesis that individual differences in psychological differtiation are related to the perceptions of the independence of leadership behaviors was tested. After viewing a supervisor-subordinate interaction sequence on a closed-circuit television tape, Ss responded to questionnaires measuring their perceptions/judgments of the supervisor's behavior and their degree of psychological differentiation. The results below supported the hypothesis in that field dependent Ss perceived/judged Consideration and Initiating Structure behaviors to be significantly more related than field independent Ss. The implications of these results are discussed in terms of both the leadership and the perceptual/cognitive literature.

TABLE 1
Correlations Between Consideration and Initiating Structure
By GEFT Category

GEFT Category[a]	Correlation	Difference[b]
Field Independent	-.31 (32)	2.36*
Field Dependent	-.72** (37)	

Note - The bracketed values are the respective N's.

[a] The GEFT categories were formed by splitting the score distribution as follows: Field Independent, all scores above the 75th percentile; Field Dependent, all scores below the 25th percentile.

[b] Based on the statistic $\frac{z_1 - z_2}{\sigma_{(z_1 - z_2)}}$

* $p < .05$

** $p < .01$

THE RELATIONSHIP BETWEEN PSYCHOLOGICAL DIFFERENTIATION AND PERCEPTIONS OF SUPERVISORY BEHAVIOR[1]

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Most conceptualizations of leadership include the relationships between the leader and subordinates as an important variable. However, only recently has this concern with the subordinate been manifested in research efforts (House, Filley, & Gujarati, 1971; Kavanagh, 1973; Thompson, 1971), and these efforts have been concerned with the effects of various subordinate characteristics, (e.g., competence, self-perception) on the subordinates' descriptions of supervisory behavior. One method used to obtain descriptions of supervisory behavior has been to collect perceptions/judgments from subordinates using the Leader Behavior Description Questionnaire (LBDQ) (Fleishman, 1953). On the basis of factor analysis, this questionnaire was developed to measure two independent behavioral dimensions of leadership called Consideration (C) and Initiating Structure (IS). However, a recent review of the literature (Weissenberg and Kavanagh, 1972) concluded that C and IS are not always empirically independent, particularly when they are measured by the LBDQ. Given this strong empirical evidence, the critical research question now becomes why varying degrees of correlation between C and IS are found across various studies where none are expected.

Obviously, many situational, task, and/or personality variables could be affecting these descriptions, but it seems logical that individual differences among subordinates in perceptual/informational processing abilities

would certainly be related to how they respond to items describing their supervisor's behavior. One such variable has been identified as psychological differentiation (Witkin, Dyk, Faterson, Goodenough, & Karp, 1962), which has been used to define differences between individuals' modes of perceptual response from analytic to global when presented with complex stimuli. Specifically, the more differentiated (field independent - FI) person uses a more analytical approach to organizing his environment and experiences, while the field dependent (FD) person uses a global approach to organize his environment (Witkin, et.al., 1962). Testing this general characteristic in terms of interpersonal judgments, Gruenfeld and Arbuthnot (1969) found that FD individuals "are likely to be unable to distinguish among the various characteristics of each individual (p. 42)."

These findings indicate that FI and FD individuals should differ in their perceptions and evaluations of leader behaviors, particularly in terms of the relationship between C and IS behaviors, but this has never been directly tested. That is, because the FD person creates and uses fewer categories to structure his world, he must see more stimuli as beeing correlated. The FI person, on the other hand, has more categories to sort his experiences and can judge stimuli in a more independent fashion. Therefore, one would suspect that FD individuals would use a single category for both C and IS behaviors whereas FI persons could use two categories, that is, it was hypothesized that the more global perceivers (FDs) would judge C and IS to be more highly intercorrelated than would FI persons.

Method

Television tapes, created for an earlier investigation (Kavanagh, 1973), were used as the stimulus materials for the Ss. The tapes depicted a sequence of events, supposedly in a carpenter shop of a large plant, involving interactions between a supervisor and one of his suburdinates. Further details on the tapes can be found in Kavanagh (1973).

The Ss were given brief instructions that they were going to see a television tape showing an industrial situation involving a supervisor and a subordinate. They were informed that after viewing the tape they were going to complete a questionnaire asking for their reactions to the supervisor's behavior from the viewpoint of the subordinate.

After viewing the tapes, the Ss completed two questionnaires. The Ss' perceptions/judgments of the supervisor's behavior on the two dimensions of C and IS were measured using 48 items from Fleishman, Harris and Burtt (1955). The field dependence-independence of the Ss was measured by the Group Embedded Figures Test (GEFT) (Cf-1).[2]

The Ss were 127 male undergraduate students, mean age -20.13, taking an introductory course in organizational behavior. The mean score of these Ss on the GEFT was 11.7 with a range of 0.5 to 28.75. This distribution of scores compares favorably with results obtained by other investigators (Gruenfeld and Arbuthnot, 1969; Gruenfeld and Weissenberg, 1970) using the GEFT with samples from organizational settings. In order to clearly identify FD and FI Ss, only Ss below the 25th percentile were labeled field dependent and only Ss above the 75th percentile were labeled field independent.

Correlations were computed between C and IS for the two groups and then tested to determine if they were significantly different.

Results

The results of the correlational analysis, presented in Table 1, clearly

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Insert Table 1 here

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support the hypothesis of this research. The correlation for the FD group was significantly greater than the r for the FI group ($Z = 2.36$, $p < .05$). In addition, the variances for C and IS for the two groups were not statistically different, thus eliminating the possibility that the difference in correlational values could be due to restriction of range within one group. Thus, this seems to indicate that FD Ss use a single cognitive category to perceive/judge C and IS behaviors as end points of a bipolar continuum of leadership style, significantly more so than do FI Ss. In fact, the non-significant r for the FI Ss indicates Ss in this group did treat C and IS as independent dimensions, thus further supporting the hypothesized differences in perceptual/informational processing for this group.

Discussion

There are two general perspectives for interpreting the results of this study. The first is in terms of the psychological differentiation literature. As aforementioned, the FI individual is better able to analyze and articulate his experiences of the world compared to the global approach of the FD person

(Witkin, et.al., 1962). In terms of the perceptions/judgments of leader behavior, it may be simply easier to view C and IS as end points of a bipolar continuum of leadership behavior where a decrease in one type of behavior would mean an increase in the other. It takes a more analytic and more difficult (in terms of processing information) approach (characteristic of the FI person) to deal with these two behavioral dimensions as independent. The results of this study reflect the more analytic approach of the FI individual as well as his capacity for greater categorization of his environment. As such, these results are in agreement with previous work (Gruenfeld and Arbuthnot, 1969; Gruenfeld and Weissenberg, 1970) that identified degree of psychological differentiation as a meaningful individual difference variable affecting the manner in which people experience and perceive their environment, including other people.

The other perspective is the leadership literature. The relationship between leader behavior and leader effectiveness as well as employee satisfaction and performance have been well-documented and discussed. In most of the studies examining the correlates of C and IS behaviors, the LBDQ was used to measure these leadership dimensions. Since the LBDQ is completed by subordinates who are describing their supervisor's behavior, the results of this study become quite important. That is, if subordinates differ in their judgments, and consequently, the measurement of supervisory behavior, contingent on whether they are field-dependent or field-independent, then one might expect psychological differentiation to act as a moderator variable when examining the organizational correlates of supervisory behavior. Certainly, future research using subordinates' descriptions to measure supervisory style

should include a measure of the subordinates' field dependence-independence as a possible critical variable.

Another implication of the results of this study for the leadership literature is in terms of the independence of the C and IS dimensions of leader behavior. The empirical inconsistencies noted relative to the relationship between C and IS (Weissenberg and Kavanagh, 1972) may well be due to a preponderance of either FI of FD subordinates who completed the LBDQ for a particular study. It very well may be that certain types of jobs attract FD or FI persons differentially, thus leading to a disproportionate number of one or the other type, which in turn would affect the empirical independence of the two dimensions. Obviously, this is a hypothesis which requires further empirical testing.

Finally, it seems highly probable that other variables such as organizational climate, task structure, or personality could affect the correlations between IS and C. In a relevant study, Beer and Kleisath (1967) found changes in the correlation between C and IS following an O.D. intervention using the Managerial Grid, indicating organizational climate may also be directly related to subordinates' descriptions of the supervisor's style of managing.

Finally, a note of caution must be mentioned. Results of this study were based on undergraduates' responses to a taped sequence of events. Even though the distribution of GEFT scores compares favorably with those obtained in organizational settings, the generalization of these results is limited and a cross-validation in a field setting is needed. In a field situation subordinates would have many more interactions with their supervisors on which to base their behavioral descriptions.

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Footnotes

[1]This research was supported in part by a Faculty Fellowship from the State University of New York Research Foundation.

[2]Published by Educational Testing Service, Princeton, N.J. Used by permissio of the publisher.

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